

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

**REALTIME DATA, LLC,**

*Plaintiff,*

**V.**

**ACTIAN CORPORATION ET AL.,**

*Defendants.*

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**CIVIL ACTION NO. 6:15-CV-463  
RWS-JDL**

**LEAD CASE**

**JURY TRIAL DEMANDED**

**SEALED MEMORANDUM OPINION AND ORDER**

This opinion addresses claim construction arguments with respect to a disputed claim phrase in U.S. Patent No. 7,415,530 (“the ’530 Patent”) and U.S. Patent No. 9,116,908 (“the ’908 Patent”). Pursuant to an Order from the Court for claim construction briefing (Doc. No. 497), Defendant Riverbed Technology, Inc. (“Riverbed”) filed an Opening Claim Construction Brief (Doc. No. 516), to which Plaintiff Realtime Data, LLC (“Realtime”) filed a Sealed Response (Doc. No. 535). Upon consideration of the parties’ arguments and for the reasons stated herein, the Court adopts the construction set forth below.

**OVERVIEW OF THE PATENT**

The ’530 and ’908 Patents are related patents that share a common specification. These patents generally relate to methods to accelerate the storage and retrieval of data blocks from a memory device. *See* ’530 Patent, at 12:38-40. Both patents are titled “System and Methods for Accelerated Data Storage and Retrieval.” Claim 1 of the ’530 Patent recites:

1. A system comprising:
  - a memory device; and
  - a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in

received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, ***said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form***, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block.

'530 Patent, at 18:24-42 (emphasis added); *see also Inter Partes* Reexamination Certificate (Aug. 16, 2013) (confirming patentability of Claim 1 and other claims). Claim 1 of the '908 Patent recites:

1. A system comprising:
  - a memory device; and
  - a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block;wherein ***the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form.***

'908 Patent, at 18:50-62 (emphasis added). Claim 21 of the '908 Patent contains the same language emphasized in Claim 1 of the '908 Patent.

## LEGAL STANDARD

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303,

1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313-1314; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification, and the prosecution history. *Phillips*, 415 F.3d at 1312-13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312-13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003). Claim language guides the Court’s construction of claim terms. *Phillips*, 415 F.3d at 1314. “[T]he context in which a term is used in the asserted claim can be highly instructive.” *Id.* Other claims, asserted and unasserted, can provide additional instruction because “terms are normally used consistently throughout the patent.” *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be

overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. For example, “[a] claim interpretation that excludes a preferred embodiment from the scope of the claim ‘is rarely, if ever, correct.’” *Globetrotter Software, Inc. v. Elan Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. *Home Diagnostics Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”). The well-established doctrine of prosecution disclaimer “preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Omega Eng’g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir.

2002); *see also Springs Window Fashions LP v. Novo Indus., L.P.*, 323 F.3d 989, 994 (Fed. Cir. 2003) (“The disclaimer . . . must be effected with ‘reasonable clarity and deliberateness.’”) (citations omitted)). “Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1988) (quotation omitted). “As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Omega Eng’g, Inc.*, 334 F.3d at 1324.

Although “less significant than the intrinsic record in determining the legally operative meaning of claim language,” the Court may rely on extrinsic evidence to “shed useful light on the relevant art.” *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful.” *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

In patent construction, “subsidiary fact finding is sometimes necessary” and the court “may have to make ‘credibility judgments’ about witnesses.” *Teva v. Sandoz*, 135 S.Ct. 831, 838 (2015). In some cases, “the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period.” *Id.* at 841. “If a

district court resolves a dispute between experts and makes a factual finding that, in general, a certain term of art had a particular meaning to a person of ordinary skill in the art at the time of the invention, the district court must then conduct a legal analysis: whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review.*” *Id.* (emphasis in original). When the court makes subsidiary factual findings about the extrinsic evidence in consideration of the “evidentiary underpinnings” of claim construction, those findings are reviewed for clear error on appeal. *Id.*

## DISCUSSION

Claim Term
<p>“said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form”</p> <p>(’530 Patent, Claim 1)</p> <p>“the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form.”</p> <p>(’908 Patent, Claim 1, 21)</p>

The parties’ sole dispute is whether the above-identified claim terms should exclude the time to transmit the data stream to the memory device.

Riverbed argues that “storage” should be construed as “the act of placing data on the memory device.” (Doc. No. 516, at 1.) Riverbed further asserts that this construction “properly exclude[s] transmission.” (*Id.*) Riverbed asserts that the specification distinguishes between concepts of storage and transmission. (*Id.* (citing ’530 Patent, at 12:46-49 (“[T]he encoded data block . . . is then output [from the data accelerator] for subsequent data processing, storage, *or* transmittal.”) (emphasis added))); *see also* Doc. No. 436, at 13-14.) Riverbed emphasizes that Claim 17 of a “related and contemporaneous” patent, U.S. Patent No. 7,321,937, includes the

limitation “wherein said compressing and said transmitting of said compressed data stream over said output occurs faster than a transmission of said data stream in uncompressed form over said output.” (See Doc. No. 436, at 12-13.) Riverbed argues that this phrase shows that the inventor “knew how to—and did—claim transmission.” (Doc. No. 516, at 1.) Riverbed also argues that the prosecution history and Realtime’s statements in *inter partes* review proceedings indicate that transmission is a different concept from storage. (See *id.* at 2-3; see also Doc. No. 436, at 14-16.) Riverbed argues that the ’530 and ’908 Patents “address the bottleneck created when a memory device receives data faster than it can store the data” and thus “ignore[] the bandwidth of the connection between the data accelerator and the memory device.” (Doc. No. 516, at 4; Doc. No. 436, at 13.) On that basis, Riverbed argues that a person of skill in the art would not interpret the storage limitations to include transmission time or bandwidth. (Doc. No. 516, at 5.) Riverbed also submits the testimony of Dr. John Villasenor to support its claim construction arguments. (See Doc. No. 516-1 (“Villasenor Decl.”).)

Realtime argues that Riverbed’s proposed construction of “storage” as “placing data on the memory device” “describes the overall process of moving data to the memory device and recording data on the memory device.” (Doc. No. 535, at 1.) Realtime argues that “[b]y analogy, placing a box in the attic requires carrying the box up the stairs and putting the box down.” (*Id.*) Realtime argues the storage limitation in the context of the ’530 and ’908 Patents “is all about accelerating the end-to-end process of data transmission and recording.” (*Id.*) Realtime notes that a preferred embodiment of the ’530 Patent shows storage of compressed data beginning in time interval T3, immediately after compression in time interval T2. (*Id.* at 2 (citing ’530 Patent, at 7:42-48; Fig. 4a).) Realtime similarly argues that Riverbed’s claim term interpretation would render dependent Claim 2 of the ’530 Patent nonsensical “because it would

be impossible for the data accelerator to store anything to the memory device.” (*Id.* (*citing* ’530 Patent, Claim 2 (“said data accelerator stores said first descriptor to said memory device.”)).) Realtime further notes that dependent Claim 7 of the ’530 Patent “shows that the data accelerator can be connected to the memory device through a long transmission line,” thus contemplating remote data storage. (*Id.* (*citing* ’530 Patent, Claim 7 (“said data accelerator is coupled to said memory device via a fibre channel”); Doc. No. 536 (“Zeger Decl.”), ¶4 (“a ‘fibre channel’ . . . is a transmission line, and can span multiple miles.”)).) Realtime also explains why it believes each of Riverbed’s arguments to exclude transmission fail, asserting (1) the specification never describes storage or transmission as mutually exclusive; (2) Claim 17 of the ’937 Patent “does not even recite ‘storage,’ nor say that transmission must be excluded from storage”; (3) during the prosecution history of the ’530 Patent, the applicant merely repeats the claim language and never says that “storage time excludes the time for transmitting the data stream,” and (4) the extrinsic evidence supports a broader understanding of “storage” than “recording.” (*Id.* at 3-5; *see also* Doc. No. 456, at 13.) Realtime submits the testimony of Dr. Kenneth Zeger to support its claim construction arguments. (*See* Zeger Decl.)

Claim 1 of the ’530 Patent recites, *inter alia*,

a memory device; and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream . . . is compressed by said data accelerator to provide a compressed data stream . . . said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form.

The claim language itself says nothing about “transmission.” What the claim does say is that the data accelerator and memory device are “coupled” and that a data stream compressed by the accelerator is stored on the memory device. (*See also*, ’530 Patent, Claim 7.) Nothing in this



“coupling” limits the disputed “faster than” limitation to exclude the time data is transmitted to the memory device.

Defendant’s argument regarding Claim 17 of the ’937 Patent is unpersuasive. Claim 17 of the ’937 Patent recites “wherein said compressing and said transmitting of said compressed data stream over said output occurs faster than a transmission of said data stream in uncompressed form over said output.” This claim does not recite storage. Thus, it does not support a finding that storing and transmitting are mutually exclusive.

As with the claims, Defendant has not demonstrated that the specification precludes transmission from being part of storage. In one embodiment, the specification teaches, “[c]ompression of data block 1 occurs during time interval T2 and the storage of the encoded data block 1 occurs during time interval T3. . . . [D]ata storage of the corresponding encoded data block occur[s] in the next time interval after completion of the data compression.” ’530 Patent, 7:42-48. This disclosure thus contains no suggestion of any time gap between compression and storage. Excluding transmission from the term “storage” would read this embodiment out of the claims because it would effectively create a time gap between the compression and storage steps. *SanDisk Corp. v. Memorex Prods.*, 415 F.3d 1278, 1285-86 (Fed. Cir. 2005) (“A claim construction that excludes a preferred embodiment, moreover, is rarely, if ever correct” (internal quotations omitted)).

Defendant argues that the patents “address the bottleneck created when a memory device receives data faster than it can store the data.” (Doc. No. 516, at 4 (*citing* ’530 Patent, at 2:19-55).) Specifically, the ’530 Patent specification addresses the problem of hard disk read/write speeds being much slower than the speeds of buses (for instance, a Peripheral Component Interconnect (PCI) bus) used to transmit data to the hard disk. *See* ’530 Patent at 2:27-32

("[c]urrently the fastest available . . . disk drives support only a 17.1 Megabyte per second data rate (MB/sec)" whereas a PCI bus has "input/output capability of 264 MB/sec"). The '530

Patent states:

For example, if the data storage device (e.g., a typical target mass storage device) is capable of storing 20 megabytes per second and the data storage accelerator is capable of providing an average compression ratio of 3:1, then 60 megabytes per second may be accepted as input.

*Id.*, at 5:37-41. Defendant's argument, that this example indicates storage excludes transmission, is unpersuasive. Indeed, this passage effectively contemplates transmission time being subsumed in the storage process. The fact that a low bandwidth connection would not work in the above example is inconsequential to the question of whether "storage" may include "transmission" in this context in the '530 and '908 Patents. Defendants have not pointed to any language in the specification indicating that the terms "storage" and "transmission" are mutually exclusive or redefining "storage" to necessarily exclude transmission.

Likewise, the prosecution history does not support limiting the scope of the term "storage." To overcome a 35 U.S.C. § 112 rejection, the applicant stated:

The compressing and the storing of the compressed data stream occurs faster than the data stream is able to be stored to the device in received form. This latter element, objected to by the Examiner, is a comparison of (a) the compressing and the storage of the compressed data stream to the device, to (b) the storage of the data stream to the device had the data stream been stored in received form.

(Doc. No. 516, Ex. 2 (Dec. 28, 2007 Reply to Office Action, at 8-9).) The applicant essentially repeats the claim language in this statement, and certainly does not state that storage time excludes the time for transmitting the data stream from the data accelerator. This does not amount to a "clear disavowal" of claim scope. *See Sunrace Roots Enterprise Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1306 (Fed. Cir. 2003) ("To be given effect, such a disclaimer must be clear and unmistakable." (internal quotations omitted)).

Defendant's arguments regarding statements made during reexamination of the '530 Patent and *inter partes* review proceedings are also unpersuasive. "Because the statements in the prosecution history are subject to multiple reasonable interpretations, they do not constitute a clear and unmistakable departure from the ordinary meaning of the term." *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1332 (Fed. Cir. 2004). For instance, during reexamination, the applicant stated:

While Aakre alleges that the system "reduces the time required to store data on tape," (Aakre, 2:20-21), the reduction in time is only in comparison to prior art systems where the irregular flow of compressed data was not conducive to efficient data transmission. Thus, Aakre does not disclose a system where 'compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form' as recited in claim 1.

(Doc. No. 444-4, Appx. No. 43 (Patent Owner's Response to Office Action of Sept. 21, 2012, '530 Patent Reexam), at 914.) As Realtime notes, this statement could reasonably be interpreted to mean that the applicant distinguished Aakre solely on the basis that Aakre's disclosed "reduction in time is only in comparison to the prior art systems," not within the system itself. (See Doc. No. 479, at 4.) Likewise, in a Patent Owner Preliminary Response during *inter partes* review proceedings, Realtime distinguished a reference on the basis that, in the context of that reference, "shorter transportation time" meant "shorter transportation time for more effective use of a communication line between a computer and an external memory device, not the claimed faster storage." (Doc. No. 456, Ex. 13 (Patent Owner's Preliminary Response, IPR2016-00375), at 26, heading III.A.1.) Again, these statements do not amount to a clear disavowal because they can be reasonably interpreted to mean that Realtime distinguished the reference because it referred *solely to* transmission over communication lines and made no reference to storage. In other words, there is no clear statement that transmission is not a part of the storage process in the context of the patent claims.

In light of these considerations, the Court finds it improper to limit the term “storage” to exclude transmission time between the data accelerator and memory device. Having resolved this dispute between the parties, it is unnecessary to construe this term. *See, e.g., Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015).

### **CONCLUSION**

For the foregoing reasons, the Court finds that no construction is necessary for the phrases “said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form” (’530 Patent, Claim 1) and “the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form.” (’908 Patent, Claim 1, 21).

Within seven (7) days of the issuance of this Order, the parties shall file a notice with the Court indicating whether the Order can be unsealed, or requesting appropriate redaction.

**So ORDERED and SIGNED this 5th day of May, 2017.**

  
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JOHN D. LOVE  
UNITED STATES MAGISTRATE JUDGE